

FT 04

Photoelectric diffuse sensor



PRODUCT HIGHLIGHTS

- Smallest sensor format with IO-Link
- Diameter 4 mm
- Parameterisation via IO-Link (i.a. sensitivity, switching frequency, N.O. / N.C., teach-in)
- No mutual interference

Optical data		Functions	
Maximum range	0 ... 60 mm ¹	Indicator LED, green	Switching state indicator
Scanning distance	0 ... 50 mm ¹	Indicator LED, yellow	Functional reserve indicator
Type of light	Red, 630 nm	Sensitivity adjustment	20 ... 60 mm, IO-Link
Light spot size	See diagram	IO-Link	1.0
Electrical data		Mechanical data	
Operating voltage, +U _B	10 ... 30V DC	Dimensions (plug device)	Ø 4 x 45 mm
No-load current, I ₀	≤ 12 mA	Dimensions (cable device)	Ø 4 x 35 mm
Output current, I _e	≤ 100 mA	Enclosure rating	IP 67 ³
Protective circuits	Reverse-polarity protection, U _B / short-circuit protection	Material, housing	Stainless steel, V2A
Power On Delay	120 ms	Material, front screen	PBT / PMMA
Switching output, Q	PNP max. 100 mA / high ≤ (U _B - 2.0V) / approx. 0V	Type of connection	See selection table
Output function	N.O. ² / N.C.	Ambient temperature: operation	-25 ... +65 °C
Switching frequency, f (ti/tp 1:1)	≤ 500 Hz / ≤ 1 kHz ² / ≤ 2,5 kHz	Ambient temperature: storage	-25 ... +65 °C
Response time ²	≤ 200 µs / ≤ 500 µs ² / ≤ 1 ms	Weight (plug device)	4 g
		Weight (cable device)	30 g
		Vibration and impact resistance	IEC 60947-5-2
IO-Link			
Communication mode	COM 2		
Min. cycletime	2.3 ms		
SIO mode	Compatible		
Length process data	2-bit input		
Specification	1.0		

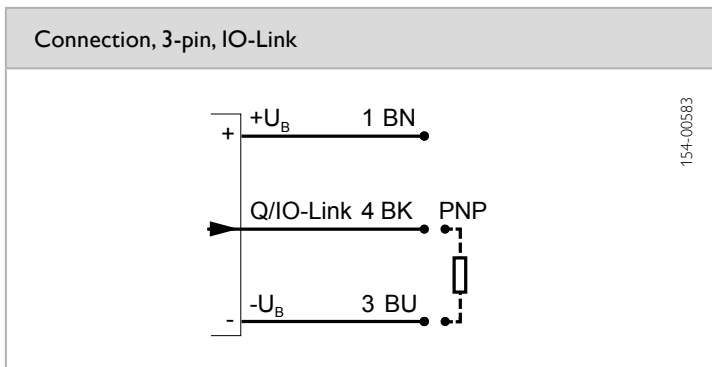
¹ Reference material: Kodak white, 90 % reflectivity

² Standard: N.O. / 1 kHz / 500 µs, further values parameterizable via IO-Link

³ With connected IP 67 plug

Switching output	Type of connection	Part number	Article number
PNP / IO-Link	Plug, M8, 3-pin	FT 04 R-PSL-M3	719-21000
PNP / IO-Link	Cable, PUR, 3-wire, 2 m	FT 04 R-PSL-K3	719-21001

Plug connection	Cable connection
<p>153-13579</p>	<p>153-13580</p>



Functional reserves	Light spot size
<p>155-03319</p>	<p>155-03363</p>

Reference material	Scanning distance	Accessories	
White (90 %)	50 mm	Connection cables	From Page A-38
Grey (18 %)	30 mm	Brackets	From Page A-4
Black (6 %)	12 mm		